Information Bulletin Number 0710131

MRSA Infections Increasing in the U.S.
Firefighters, CFRs, EMTs and Paramedics At Risk

MRSA or methicillin-resistant Staphylococcus aureus is a bacterial infection, transmitted from person-to-person, that in the past was mainly associated with health care facilities.

Today, MRSA has taken the lead to become the most frequent cause of skin and soft tissue infections within the United States. Research conducted during July 2004 through December 2005 suggests that this disease is not only a major public health problem, but that it is no longer confined to acute health care.

Community-associated MRSA is defined as a case that has no documented community-onset health care risk factors which include hospitalization, surgery, long-term care residence, and MRSA infection. Among those found to be at the highest risk are people 65 years or older, African Americans, and males; those with the lowest risk are people between the ages of 5 and 17.

The overall estimation for 2005 was 94,360 cases nationally of MRSA with an estimated 18,650 deaths. According to the "2005 AIDS Epidemic Update" produced by UNAIDS and the WHO, the estimated number of deaths in North America due to AIDS in 2005 was 18,000.

In recent years, community-associated MSRA infections have been spreading through prisons, gyms, locker rooms, and in poor urban neighborhoods. The Washington Post reported that more than a dozen cases have been identified among students in Maryland and Virginia school systems.

The Office of Fire Prevention & Control encourages first responders to be aware of their surroundings. Document a patient's history and maintain proper hygiene standards that are already necessary to prevent other infections. Be aware that MRSA is most often spread by skin-to skin contact, contact with a contaminated surface, or through the sharing of personal items such as towels and razors. Blood-Born Pathogen (BBP) precautions will protect the first responder from most incidents of contamination. If MRSA, or other infectious or contagious situations are suspected, Body Substance Isolation (BSI) procedures should be used as well. Regardless of the barrier protection used, good personal hygiene will protect you, your co-workers, and your families.

For further information, read the actual research article in the Journal of American Medical Association, October 17, 2007—Vol 298, No. 15 "Invasive Methicillin-Resistant Staphylococcus aureus Infections in the United States;" or visit http://www3.niaid.nih.gov/topics/AntimicrobialResistance/default.htm.

About the MRSA Bug...finding its way into the school system Methicillin-resistant Staphylococcus Aureus (MRSA) is a type of staph that is resistant to certain antibiotics. These antibiotics include methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin. Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities (such as nursing homes and dialysis centers) who have weakened immune systems but is now making its way into the nation's school system. Staph or MRSA infections in the community are usually manifested as skin infections, such as pimples and boils, and occur in otherwise healthy people.

Hygiene steps to help prevent infection...Practice good hygiene:

- **Keep hands clean by washing thoroughly with soap and water or using an alcohol-based hand sanitizer.**

- **Keep cuts and scrapes clean and covered with a bandage until healed.**
- **Avoid contact with other people's wounds or bandages.**
- **Avoid sharing personal items such as towels or razors.**

For additional information and details, please follow these links:

National Institute of Allergy and Infectious Diseases
http://www3.niaid.nih.gov/topics/AntimicrobialResistance/understanding/examples/methicillin.htm

Centers for Disease Control & Prevention (CDCP)
http://www.cdc.gov/ncidod/dhqp/ar_mrsa.html

http://www.cdc.gov/niosh/topics/mrsa/

NYS Department of Health
http://www.health.state.ny.us/diseases/communicable/staphylococcus_aureus/methicillin_resistant/